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## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

## Listing of Claims:

 $1. \ \ (Original) \ A \ radiation-sensitive \ resin \ composition \ comprising$ 

an acid-labile group-containing resin which is insoluble or scarcely soluble in alkali, but becomes alkali soluble by the action of an acid, and

a photoacid generator,

wherein the acid-labile group-containing resin comprises a recurring unit of the following formula (1) and has a ratio of a weight average molecular weight to a number average molecular weight (weight average molecular weight/number average molecular weight) of smaller than 1.5 and is polymerized with a living radical polymerization initiator.

$$\begin{array}{c|c}
R^1 & C = 0 \\
\hline
 & C = R^2 \\
R^2 & R^2
\end{array}$$

(1)

wherein R<sup>1</sup> individually represents a hydrogen atom, methyl group, trifluoromethyl group, or hydroxymethyl group and R<sup>2</sup> individually represents a monovalent alicyclic hydrocarbon group having 4-20 carbon atoms or a derivative thereof, or a linear or

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branched alkyl group having 1-4 carbon atoms, in which at least one of  $R^2$  groups is a monovalent alicyclic hydrocarbon group or a derivative thereof, or any two of  $R^2$  groups form a divalent alicyclic hydrocarbon group having 4-20 carbon atoms or a derivative thereof in combination with the carbon atom to which the two  $R^2$  groups bond, with the remaining  $R^2$  group being a linear or branched alkyl group having 1-4 carbon atoms or a monovalent alicyclic hydrocarbon group having 4-20 carbon atoms or a derivative thereof.

(Original) The radiation-sensitive resin composition of claim 1, wherein the
acid-labile group-containing resin comprises a recurring unit of the formula (1) and at
least one recurring unit selected from the group consisting of the recurring units of the
following formulas (2)-(7),

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wherein R <sup>1</sup> individually represents a hydrogen atom, methyl group, trifluoromethyl group, or hydroxymethyl group, A represents a single bond, a substituted or unsubstituted, linear or branched alkylene group having 1-6 carbon atoms, a mono- or dialkylene glycol group, or an alkylene ester group, B represents a single bond, a substituted or unsubstituted alkylene group having 1-3 carbon atoms, an alkyloxy group, or an oxygen atom, E represents a single bond or a divalent alkyl group having 1-3 carbon atoms, R<sup>3</sup> individually represents a hydroxyl group, cyano group, carboxyl group, -COOR<sup>5</sup>, or -Y-R<sup>6</sup>, wherein R<sup>5</sup> represents a hydrogen atom, a linear or a branched alkyl group having 1-4 carbon atoms, or an alicyclic alkyl group having 3-20 carbon atoms, Y

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individually represents a single bond or a divalent alkylene group having 1-3 carbon atoms, R<sup>6</sup> individually represents a hydrogen atom, hydroxyl group, cyano group, or -COOR<sup>7</sup>, provided that at least one R<sup>3</sup> group is not a hydrogen atom, R<sup>7</sup> represents a hydrogen atom, a linear or branched alkyl group having 1-4 carbon atoms, or an alicyclic alkyl group having 3-20 carbon atoms, G represents a single bond, a linear or branched alkylene group having 1-6 carbon atoms, an alicyclic hydrocarbon group having 4-20 carbon atoms, an alkylene glycol group, or an alkylene ester group, J, L, N, and M individually represent a single bond, a substituted or unsubstituted, linear, branched, or cyclic alkylene group having 1-20 carbon atoms, an alkylene glycol group, or an alkylene ester group, p is 0 or 1, R<sup>4</sup> represents a hydrogen atom, a linear or branched alkyl group having 1-4 carbon atoms, an alkoxy group, a hydroxyalkyl group, or a divalent alicyclic hydrocarbon group having 3-20 carbon atoms or a derivative thereof, and q is 1 or 2.

- (Currently Amended) The radiation-sensitive resin composition of claim 2, wherein the acid-labile group-containing resin comprises [[the]] a recurring unit of the formula (2), at least one of the recurring units of the formula (2) to (7).
- 4. (Previously Presented) The radiation-sensitive resin composition according to Claim 2, wherein the content of the recurring unit (1) is 15-70 mol% of the total amount of the recurring units.
- (Original) The radiation-sensitive resin composition according to claim 4, wherein the acid-labile group-containing resin is a polymer produced by random polymerization of the recurring units which form the resin.
  - 6. (Original) The radiation-sensitive resin composition according to claim 1,

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wherein the living radical polymerization initiator is a mixture of a transition metal complex, an organic halide, and a Lewis acid or an amine.

 (Original) The radiation-sensitive resin composition according to claim
 wherein the living radical polymerization initiator is a compound of the following formula (8),

wherein R' represents an alkyl group or an aryl group having 1-15 carbon atoms which may contain an ester group, ether group, amino group, or amide group; Y represents a single bond, oxygen atom, nitrogen atom, or sulfur atom; and R" represents an alkyl group or an aryl group having 1-15 carbon atoms which may contain an ester group, ether group, or amino group.

- 8. (Previously Presented) The radiation-sensitive resin composition according to Claim 6, wherein terminal processing of the living radical polymerization initiator is conducted using a heat radical generator.
- 9. (Original) The radiation-sensitive resin composition according to claim 1, wherein the photoacid generator comprises at least one compound selected from the group consisting of a triphenylsulfonium salt compound, a 4-cyclohexylphenyldiphenylsulfonium salt compound, a 4-t-butylphenyldiphenylsulfonium salt compound, and a tri( 4-t-butylphenyl)sulfonium salt compound.
  - $10. \ \mbox{(Original)} \ \mbox{The radiation-sensitive resin composition according to claim $1$,}$

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further comprising a nitrogen-containing organic compound as an acid diffusion controller.

- 11. (Previously Presented) The radiation-sensitive resin composition according to Claim 3, wherein the content of the recurring unit (1) is 15-70 mol% of the total amount of the recurring units.
- 12. (Previously Presented) The radiation-sensitive resin composition according to Claim 7, wherein terminal processing of the living radical polymerization initiator is conducted using a heat radical generator.
- 13. (New) The radiation-sensitive resin composition according to Claim 1, wherein the acid-labile group-containing resin has a ratio of a weight average molecular weight to a number average molecular weight (weight average molecular weight/number average molecular weight) of 1.0 to 1.3.
- 14. (New) The radiation-sensitive resin composition according to Claim 1, wherein the living radical polymerization initiator is a compound of the following formula (9) or (10):

$$H_{3}C$$
 $H_{3}C$ 
 $H_{3}C$ 
 $H_{3}C$ 
 $H_{4}C$ 
 $CH_{3}$ 
 $H_{5}C$ 
 $CH_{5}$ 
 $C=0$ 
 $CH_{5}$ 
 $CH_{$ 

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15. (New) A method comprising:

depositing a composition as set forth in Claim 1 onto a substrate to form a resist

film;

selectively exposing the resist film to radiation to form an exposed resist film; and

developing the exposed resist film to form a resist pattern.

16. (New) The method of Claim 15, wherein the radiation is ArF excimer laser

radiation.

17. (New) The method of Claim 15, further comprising heating the exposed resist

film prior to developing.

18. (New) The method of Claim 17, wherein the exposed resist film is heated to a

temperature of 30 to 200° C prior to developing.

19. (New) The method of Claim 18, wherein the exposed resist film is heated to a

temperature of 50 to 170° C prior to developing.

20. (New) The method of Claim 15, further comprising heating the resist film

prior to selectively exposing.